

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HIROSHI SUMIHIRO
HIDEKI KOYANAGI,
SEIICHI EMOTO,
and TOHRU WADA

Appeal No. 97-0801
Application 08/168,087¹

ON BRIEF

Before JERRY SMITH, BARRETT and RUGGIERO, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-8, which constitute all the claims in the application. An amendment after final rejection was filed on

¹ Application for patent filed December 14, 1993.

October 5, 1995 and was entered by the examiner.

The disclosed invention pertains to a moving picture decoding device for decoding a moving picture by writing and reading picture data to and from a picture memory. More particularly, the picture memory comprises a synchronous dynamic random access memory (SDRAM) having a plurality of banks of memory. The invention is particularly directed to the manner in which a bank switching address is stored in the memory for permitting continuous reading of the banks of memory in alternation.

Representative claim 1 is reproduced as follows:

1. A moving picture decoding device for decoding a moving picture by writing and reading picture data to and from a picture memory, wherein the improvement comprises:

a synchronous dynamic random access memory used as the picture memory, wherein

the synchronous dynamic random access memory has a plurality of banks, each of the banks is accessed by a common column address and a common row address, each bank designated by a bank switching address, each predetermined length of the picture data is written into only one of the plurality of banks, and the picture data is continuously read from the plurality of banks in alternation.

The examiner relies on the following references:

Normille et al. (Normille)	5,267,334	Nov. 30, 1993 (effectively filed May 24, 1991)
Shen et al. (Shen)	5,315,388	May 24, 1994 (filed Nov. 19, 1991)

Claims 1 and 5 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the disclosure of Shen. Claims 2-4 stand rejected under 35 U.S.C. § 103 as being unpatentable over

the teachings of Shen taken alone. Finally, claims 6-8 stand rejected under 35 U.S.C. § 103 as being unpatentable over the teachings of Shen in view of Normille.

Rather than repeat the arguments of appellants or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of anticipation and obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the disclosure of Shen does not fully meet the invention as recited in claims 1 and 5. We are also of the view that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 2-4 and 6-8. Accordingly, we reverse.

We consider first the rejection of claims 1 and 5 as anticipated by the disclosure of Shen. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data

Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

The examiner has indicated how he reads claims 1 and 5 on the disclosure of Shen [answer, pages 3-4]. Appellants respond that Shen does not disclose that “each predetermined length of the picture data is written into only one of the plurality of banks, and the picture data is continuously read from the plurality of banks in alternation” as recited in claims 1 and 5 because Shen stores the same data in both data banks [brief, page 4]. The examiner responds that the storing of data in only one of the data banks is inherent in the operation of Shen [answer, page 9]. Appellant disputes this assertion of the examiner [brief, pages 5-6].

At the outset, we note that Shen discloses only briefly a random access memory having dual banks as part of the description of the prior art shown in Figure 2. Shen’s invention is directed to the elimination of these dual banks and to the use of a single memory array. Therefore, the only portion of Shen’s disclosure which relates to the plurality of banks as recited in independent claim 1 is the discussion of the prior art as shown in Shen’s Figure 2.

In describing this prior art, Shen states that the “same data u is stored both in memory bank 18a and 18b. This allows the data to be accessed independently” [column 5, lines 50-52]. Thus, Shen clearly does not meet the recitation of claim 1 that the data is written into only one of the data banks.

Although the examiner attempts to view the claimed recitation as inherent in Shen, such inherency is clearly not present. The examiner may view storing in two locations as meeting storing in one location, but storing in two locations cannot meet storing in only one location as recited in claim 1. Therefore, Shen fails to disclose the limitations as recited in claim 1, and the Shen operation precludes the inherent disclosure of these limitations as argued by the examiner. Since Shen fails to disclose at least one limitation recited in claim 1, we do not sustain the rejection of claims 1 and 5 as anticipated by Shen.

We now consider the rejection of claims 2-4 and 6-8 under 35 U.S.C. § 103. In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d

1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

Claims 2-4 depend from claim 1 and add features relating to the allocation of a bank switching address and horizontal and vertical addresses of a picture image. The examiner admits that Shen has no disclosure with respect to the allocation of these addresses, but the examiner argues that “some sort of bit assignment must obviously be assigned for the horizontal (column) and vertical (row) addresses as shown in Figure 6 of Shen et al as well as obvious bank switch addressing means that may be allocated between the horizontal address and the vertical address in order to provide the horizontal and vertical addressing as shown in Figure 6” [answer, page 5]. Appellants complain that the examiner has simply dismissed the differences between the claimed invention and the teachings of Shen as being obvious without any supporting evidence [brief, pages 6-7].

We agree with appellants. The fact that some form of address allocation is necessary in Shen does not render all specific address allocations as being obvious. The examiner has not addressed the specific limitations of claims 2-4 nor offered any evidence in support of his position that the allocations as specifically recited in claims 2-4 would have been obvious in

view of the general teachings of Shen. Thus, the examiner has failed to establish a prima facie case of the obviousness of these claims. Therefore, we do not sustain the examiner's rejection of claims 2-4 based on Shen taken alone.

Independent claim 6 and dependent claims 7 and 8 stand rejected based on the teachings of Shen and Normille. Claim 6 has limitations similar to the limitations recited in independent claim 1. As noted above, Shen does not teach these limitations. The Normille teachings were added to Shen to meet limitations of claims 6-8 which are unrelated to these recitations of claims 1 and 6. Since Normille does not overcome the deficiencies of Shen discussed above, the collective teachings of Shen and Normille also do not suggest the invention as recited in claims 6-8. Therefore, we do not sustain the examiner's rejection of claims 6-8 based on Shen and Normille.

In summary, we have not sustained any of the examiner's rejections of the claims based on Shen alone or Shen and Normille. While we cannot say if there is prior art available which would render the claimed invention unpatentable, we can say that the examiner's reliance on

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Shen and Normille fails to make the case for unpatentability as asserted by the examiner. The decision of the examiner rejecting claims 1-8 is reversed.

REVERSED

JERRY SMITH
Administrative Patent Judge

LEE E. BARRETT
Administrative Patent Judge

JOSEPH F. RUGGIERO
Administrative Patent Judge

BOARD OF PATENT APPEALS AND INTERFERENCES

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